

20040105.ba v03_n588.bam.20040105

>From ???@??? Mon Jan 5 08:53:40 2004 -0600
Message-Id: <200401051453.i05Era7A014028@sco.theporch.com>
Date: Mon, 5 Jan 2004 08:53:09 CST
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 3588

BOATANCHORS Digest 3588

Topics covered in this issue include:

- 1) RE: this may be a dumb question
by "WF2U" <wf2u@starband.net>
- 2) Re: this may be a dumb question
by Heinz und Hannelore Breuer <hbreuer@debitel.net>
- 3) Re: BOATANCHORS digest 3587
by Roy Morgan <roy.morgan@nist.gov>

From: "WF2U" <wf2u@starband.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: RE: this may be a dumb question
Date: Mon, 5 Jan 2004 07:47:25 -0500
Message-ID: <NABBLNEJDDKECLKHCAAPAEGEJMAA.wf2u@starband.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Download the DejaVue viewer program and install. (I don't recall exactly where it is. Just do an Internet search for "DejaVue"). Then the *.djvu files will automatically open into the viewer.

73, Meir WF2U

-----Original Message-----

From: owner-boatanchors@theporch.com
[mailto:owner-boatanchors@theporch.com]On Behalf Of w5sum
Sent: Monday, January 05, 2004 7:20 AM
To: Old Tube Radios
Subject: this may be a dumb question

I just downloaded a file from BAMA using ftp.. it has a djvu or some such file extension.. what the heck is that and how do I open it?

thanks

Ronnie

The "AM" voice of Shreveport, Louisiana USA
formerly WN5AIA and WB5AIA
I got my Extra Class the old fashioned way... I earned it!

Message-ID: <3FF95E99.C4F119F3@debitel.net>
Date: Mon, 05 Jan 2004 13:56:30 +0100
From: Heinz und Hannelore Breuer <hbreuer@debitel.net>
MIME-Version: 1.0
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: this may be a dumb question
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
To: Old Tube Radios <boatanchors@theporch.com>

Hi Ronnie,

just go to the BAMA website. It has the links to download the necessary
program files.

73
Heinz DH2FA, KM5VT

WF2U wrote:

>
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> where it is. Just do an Internet search for "DejaVue"). Then the *.djvu
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> To: Old Tube Radios
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> formerly WN5AIA and WB5AIA
> I got my Extra Class the old fashioned way... I earned it!

Message-Id: <5.0.0.25.2.20040105094511.03fa1a20@mailserver.nist.gov>
Date: Mon, 05 Jan 2004 09:52:47 -0500
To: Old Tube Radios <boatanchors@theporch.com>
From: Roy Morgan <roy.morgan@nist.gov>
Subject: Re: BOATANCHORS digest 3587
Mime-Version: 1.0
Content-Type: multipart/mixed;
 boundary="====_2086570==_"

--====_2086570==_
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 06:19 AM 1/5/04 -0600, you wrote:
>Santa (in the guise of Gary Schneider at Playthings of the Past, Cleveland
>OH) brought me a BC-348N. It's exceedingly clean, ... like to find one of
>those weird sideways 8-pin Jones kinda sockets for the power connector.

A.B.

The connectors are available sometimes. I suggest you try Wm. Perry, info below. Just tell him you need the mount connector for the BC-348.

If your radio has the dynamotor, do run it on that. If it has an added power supply inside, beware:

- 1) the power supply adds extra heat that leads to drifting, (for SLW and such there is no problem, and this radio was NOT meant to do SSB!)
- 2) Some BC-348's used the DC resistance of the choke (which is in side the case of the audio output transformer) to develop bias for the audio output tube. Hapless modifiers of these radios would ground the B- lead from the power supply, bypassing this bias network and the audio tube would cook itself to death.

Last, if your radio has rectangular black capacitors in it that LOOK like mica caps, you have a lot of work to do. They must all, repeat all be replaced. If your radio has cylindrical metal cased caps you are lucky.

I have a manual for that radio in HTML format, of all things. I Trust you can get other copies of the manual online. Do get the right manual for your version.

I have attached my collected notes on this radio for your enjoyment. Good luck with it.

Roy

> >William Perry Company
> >92 Beechwood Rd. (Rear)
> >Louisville, KY 40207
> >502-893-8724
>No web site that I know of.
>Email reported 7/03: wmperry@covad.net
>
>
>You call him or send him a note.
>Then you wait a few days and in your mail box will show up the right
>connectors.
>Then you send him a check.. Simple.
>
>"The William Perry Company is a wholesale electronic surplus company
>located in Louisville, KY. We are a family owned and operated business
>that has been around for over 35 years. We specialize in wholesale
>electronic surplus, scrap metal, resistors, military connectors and
>commercial connectors. Connector manufacturers include: Amphenol,
>Bendix, Cannon, Burndy, Cinch and Winchester.

Available series
>types in inventory:

MS3110, MS3112, MS3116, MS3120, MS3122, MS3126,
>MS3102A, MS3106A, MS3106B, MS3102E, MS3106E, MS3108E, PT-BT-KPT,
>PTSE-BTSE-KPSE, 97 A/B, CA E/R, D-SUB, STANDARD K, 17, 26, 57, 67, 165 and
>48 series, dust caps, bushings, cable clamps, contacts, co-axels, strain
>reliefs, tools and much more!
>
>We can be reached with orders or inquiries at 502-893-8724 or fax number-
>502-893-9220. We are located at 702 Beechwood Road, Louisville, Kentucky
>40207."

--===== _2086570==_
Content-Type: text/plain; charset="us-ascii"
Content-Disposition: attachment; filename="bc348notes.txt"

To: Old Tube Radios <boatanchors@theporch.com>
Date: Tue, 18 Apr 2000 00:28:44 +0000
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT
Subject: Re: BC-348 Questions
CC: Old Tube Radios <boatanchors@theporch.com>

> Date: Mon, 17 Apr 2000 12:16:22 +0000
> From: "Prof. Arthur I. Larky" <ail0@lehigh.edu>
> To: Old Tube Radios <boatanchors@theporch.com>
> Cc: boatanchors@theporch.com
> Subject: Re: BC-348 Questions
> Freeberg, Scott (STP) wrote:
> >
> > Hi,
> >
> > I just bought a BC-348R in excellant condition at a hamfest yesturday. I
> > would like to find a power connector for it as well as a manual. Is there
> > a 348 discussion group?
> >
> > Thanks,
> >
> > Scott WA9WFA in Saint Paul Minn
>
> August Johnson, KG7BG, kg7bg@whitemtns.com has a CD which covers BC-348
> J, N and Q manuals. I thought it was very well done.
> Art
>
>

Greetings;

That C.D. won't help with your Belmont unit, it is only similar to the Wells-Gardner built sets on the C.D. They are quite different in detail.

FWIW, your "R" unit is probably the nicest version of the elegant Belmont-built '348s overall. The Wells-Gardner versions were a simplified and lower cost version, IMO (tho' equivalent in performance, sources say). I believe Robt Downs still has manuals and/or copies of same for these. Get the most elaborate one if the set is a "keeper". You will have to replace *every* paper cap in the thing, incl the one in the BFO can, if you intend to operate it, esp at full 225V B+. Great headphone SWL set!!

Regards; Steve

From: "Hue Miller" <kargokult@proaxis.com>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: "Old Tube Radios" <boatanchors@theporch.com>
Subject: Re: BC-348 Questions
Date: Tue, 18 Apr 2000 01:03:42 -0700
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

-----Original Message-----

From: Steve <scb@fly.hiwaay.net>

. The Wells-Gardner versions were a simplified and lower cost version, IMO
--Just FMI, what kind of items were simplified & lower cost? (tho' equivalent in performance, sources say).
--No doubt. There were performance standards to meet to satisfy the contract.
Actually, IMO, the "best" are the earlier versions, no LF band, thus somewhat even better bandspread on the HF bands.
Hue Miller

From: "Steve" <scb@fly.hiwaay.net>
To: Old Tube Radios <boatanchors@theporch.com>
Date: Wed, 19 Apr 2000 00:16:11 +0000
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT
Subject: Re: BC-348 Questions
>"--Just FMI, what kind of items were simplified & lower cost?"
Thanx for your responses, Hue.
The IF unit in the "Q" I had here looked pretty "cheezy" to me, like it had come off the same line as an AA-5. Also, I like a way to match the available antenna to the set, which the "ANT ALIGN" control provides on the others. The lack of component boards and the nice wiring looms also seem to denote cost-conscious assembly technique. There are other compromises in the W-Gs, such as the bandswitch detent. Excepting the retention of the cast alloy skeleton and the RF modules, they just come across as a cheap knock-off of the others. However, they do have more room for experimentation and are really a simpler assembly, esp in the IF. I can readily see why the mods were mainly centered around the W-G versions. The others are really too nice to cut up anyway (even tho' that didn't stop a previous owner of my "L" from having a "go" at it). Pristine on the top it was, but a real rats nest underneath. Hope he nicked his fingers cutting the loom! As I said, just my opinion. And yes, the LF capability is pretty much a waste of a bandswitch point these days.
Best Regards; Steve Bringham

Date: Wed, 19 Apr 2000 13:34:44 -0500
From: David Stinson <arc5@ix.netcom.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: MilSurplus@qth.net, boatanchors@listserv.tempe.gov, boatanchors@qth.net, boatanchors@theporch.com
Subject: Re: [MilSurplus] BC-348 Model no. ???
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Wn4i@aol.com wrote:

>

> I have a ...BC-348but the name plate is goneplease tell me
> the way to recognize a P from a Q modelany difference I can tell by
> the schematics ?

If it has four 6SK7s, it's a J,N,or Q model (J and N are electrically identical to a Q).

If it has four 6K7s, it's an H,K,L or R model.

If it has a type 41 output tube, it's a P, M, or E model.

> What the market value ?....the case also looks nice .

Depends entirely on exactly what modifications have been done.

Absolutely original and unmodified with dyno will go

over \$200. If it has *any* holes drilled in it *anywhere,*

I wouldn't personally pay \$40 for it. Just depends.

73 DE Dave Stinson AB5S

Date: Tue, 20 Feb 2001 10:53:42 -0600

From: David Stinson <arc5@ix.netcom.com>

MIME-Version: 1.0

To: Old Tube Radios <boatanchors@theporch.com>

Subject: Re: BC-342 horror stories wanted

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

> I then glowered at all of those soldered shut

> hermetic capacitor modules. It's enough to drive one bunkers

> to think of all the work that the sight of

> those caps implies. What I need is some psychological bolstering...

Take heart...

I've worked on a'many of these type receivers.

In my experience, the solder-sealed, oil-filled hermetics are often doing just fine after their long hibernation.

Unless they've been subjected to a lot of intense heat or moisture to the point that the cases are corroded, you probably won't find more than a couple bad, if that.

Exception- look at the seals at the terminals.

If you see rotten rubber and leaking oil, you need to check those extra close. Bring up the B+ slowly and look for warm components, etc. You should get signals at low B+ (50-60 volts or so- as little as 25 volts on some radios). This will allow you to troubleshoot without burning anything up.

Or you can just get out the old ZM-11 or ZM-30 cap checker and start at one end....

Dave S.

(On the BC-342):

Date: Sun, 04 Mar 2001 05:00:28 -0800

From: Arden Allen <gumbear@pacbell.net>
Subject: BC-342: Coal mining ain't so bad.....
To: Old Tube Radios <boatanchors@theporch.com>
Message-id: <0G900026LC3AWI@mta6.snfc21.pbi.net>
MIME-version: 1.0

Content-type: text/plain; charset=ISO-8859-1
Content-transfer-encoding: 7bit

Fellow masochists;

It took me a week to rebuild just the RF subchassis. After I had removed it from the main chassis I checked the 0.05uF canned paper capacitors. There are nine caps, three in a can (and three more of the triple cap cans on the main chassi). The units in my '342 were made by Aerovox. They were all pretty bad. The average insulation resistance was about 400K. No problem measuring that value with an ohmmeter. I stripped the subchassis clean of wires and components with the exception of the tube filament wiring. I gutted the three cans and replaced the innards with 0.05uF 500V disk ceramics. Although it was a lot of work and messy with all the oil and dissolved insulator grime the internal spacer insulator and outer insulating washers were all salvageable and with new terminal posts made from brass screws the finished rebuilds are quite satisfactory to my liking. I rewired the RF strip with all new metal oxide resistors. Only three more cans to rebuild. The large bathtub with the piggybacked little bathtub on the main chassis will be replaced by regular caps wired between two terminal strips. That will free up some room in the spaghetti bowl. All the rest of the caps are non-original Sprague black tubulars which were probably installed in 1951 which is the MFP date stamped in a couple of places. They are all leaky and will be replaced.

The next step, which I am heavily involved in now, is removing the tuning and bandswitching gearing for complete cleaning, lubing and replacing the felt in the slip clutch. I worked at removing the front panel for FOUR (4) hours! Talk about a convoluted design and construction. I can't believe RCA didn't sap the strength of all its assemblers with subsequent great delivery delays of this receiver during the war. They just crammed everything in, major league pileup style. I'm more methodical how I pack my garbage can for weekly pickup than that radio is built! On one end of the mounting plate that covers the tuning gears and mounts one idler for the band change is a hole through which passes half a dozen wires. The ONLY expedient way to get the plate dismounted is to cut through the middle of those wires. That will require completely rewiring the MVC/audio gain dual pot along with a four component terminal board hidden in an inaccessible place behind the front panel between the dual pot and main chassis.

Examining the wiring with all of the brittle oversized wires tells me one thing: Gut the main chassis wiring and rewire it with all the mods necessary to make it into a decently performing SWL and hamming receiver. I'll draw up a schematic with all of the changes I know will work and as I rewire the chassis I'll provide the access I need for fine tuning the changes. I'm getting some conversion information sent to me which should

give me additional ideas for improvements. Should I go for a full product detector mod also? Sounds good to me. A new output transformer for 3-4 ohm speaker operation certainly is needed. Making better use of the multitude of jacks on the front panel also. More to follow.
Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

From: N2EY@aol.com
Date: Tue, 3 Apr 2001 21:35:03 EDT
Subject: Re: GB> BC-348 Power Connxns
To: taylorge59@tryi.com, StanandlisaM@cs.com,
glowbugs@piobaire.mines.uidaho.edu
X-Mailer: AOL 5.0 for Windows sub 130
Sender: owner-glowbugs@piobaire.mines.uidaho.edu

Here are the connections to the power connector on the BC-348-14, -K, -L and -R, from TM 11-692E (May 1955). This info also applies to the BC-224-F and -K models, except that the BC-224s were meant to run on 12-14 volts instead of 24-28 volts.

This information is correct if you view the plug from the rear of the receiver (looking at the pins) with the receiver right-side-up. Each double dash (--) represents one contact on the plug, and the number immediately to the right is the contact number as referenced in the manual.

(TOP)

--1	--5
--2	--6
--3	--7
--4	--8

(BOTTOM)

Contact Assignments:

1 & 5 are audio output - they are connected across the headphone jacks. Pin 5 is grounded.

3 & 4 are the positive (ungrounded) 28 volts DC input.

7 & 8 are the negative (grounded) 28 volts DC input.

6 & 2 are the transmit relay connections. They must be connected together for the receiver to work. Neither side is grounded - 2 goes to the B+ and 6 feeds most of the screens in the receiver.

But please DON'T assume these connections are correct in your particular receiver without checking them out! Many of the receivers I have seen and owned have been modified for AC input, external power supplies, parallel operation of the heaters, all sorts of stuff. Often such mods are not immediately apparent. You don't want to blow up irreplaceable parts by careless application of voltages.

Note also that the B- in these receivers is NOT grounded, but connected to the "-H.V." wire (#4 on the dynamotor terminal board, counting from the rear of the receiver). Typical voltages were -17 volts on "B-" and +210 volts on "B+", for a total of 227 volts. It's wired this way because the 6K6GT audio stage acts as both an AF amplifier and shunt regulator. When the B+ voltage drops, bias on the 6K6GT rises in such a way that the tube draws much less current, which in turn should cause the B+ to rise. The 991 tube only regulates the HF oscillator plate voltage.

73 de Jim, N2EY

My reply:

At 09:35 PM 4/3/01 -0400, N2EY@aol.com wrote:

Here are the connections to the power connector on the BC-348-14, -K, -L and -R,

Jim,

Thanks for sending that information..

Note also that the B- in these receivers is NOT grounded, but connected to the "-H.V." wire ... It's wired this way because the 6K6GT audio stage acts as both an AF amplifier and shunt regulator.

Is this covered in the manual(s)?? It's been a long time since I read the manuals I have, so I may well not remember that point. I have always assumed that the reasons for running the B- line through the choke to ground were:

- 1) To develop bias for the audio output tube (be it a 6K6 or type 41(?) in the early sets)
- 2) To reduce the need for insulation in the choke, which is contained in the output transformer case.

To repeat the caution here, if you just ground the B- lead, either from a dynamotor or from an AC supply, the audio tube runs with out bias, experiences excessive plate current (like 80 ma instead of 30ma), causes severe audio distortion, and wears out very fast. It also may harm the rectifier tube or power

transformer.

Long live the BC-348!

From: "RB" <RBigg@seii.net>
To: <glowbugs@piobaire.mines.uidaho.edu>
Subject: GB> BC-348 clunkers
Date: Fri, 13 Apr 2001 19:34:48 -0700
X-Mailer: Microsoft Outlook Express 5.00.2615.200
Sender: owner-glowbugs@piobaire.mines.uidaho.edu

We all know what the BC-348 is----right? A clunky old vacuum tube boat anchor of a mil surplus receiver. Those old wheezers should have all been relegated to the scrap pile years ago. But wait! This isn't necessarily true. Let me explain.....

First off, you gotta understand that the blessing and curse of the BC-348 is that those things had IFs as wide as barn doors on MacDonald's farm. Some of the CW

boys hated, I mean hated those wide IFs. Others, who were possibly a little less picky and discriminating simply loved having that broad IF.

Now the BC-348 was a hot receiver. We have hot receivers now, and the BC-348 wasn't much below some of the best modern stuff insofar as sensitivity went. If

there was something out there in signal land, you could hear it on the BC-348.

The CW guys who hated the BC-348 were the VFO crowd. These were the band warriors who had the capability to come to your frequency. These guys typically would swish across the entire band with their full 30 watts of 6L6 power on, to slide

down onto your spot. They could QSY rapidly and anywhere. They wanted nice, narrow band pass receivers.

The problem for them became one of screening or filtering out other signals coming through in the BC-348 band pass. One means of doing that was to flip the Crystal Filter switch on. The BC-348 had what, at that time, was a state-of-the-art

crystal lattice filter. Those things were also pretty darn good, even by modern standards. Once you cranked the crystal filter in, that narrowed things down considerably.

The guys who loved the broad BC-348 IFs were the rock bound CW hounds.

These guys would typically have 3 or 4 crystals scattered around on the 80m CW part of

the band. They would camp out on one of these spots and proceed to tend to the business of trying to get QSOs. Now this is where the BC-348 would really shine. With it centered on your xtal freq, you could easily hear other signals way out on either side of your frequency. Wherever you were parked, you could work guys considerably above and below you in freq without having to touch the dial. As a matter of fact, some guys adopted a protocol which would forbid them to QSO a guy if it involved having to re-tune the BC-348, even if a bunch of other hams came on freq and told you that King Hussein was calling you 25kc down! This was understandable, as some guys had their pride to consider. Another strength of the BC-348 is that it was rock solid in stability. Once it got up to steady-state op temp, you could drop one off the desk to the floor, bang it, switch bands, whatever, and--when you came back, you'd hear exactly the same cw note as before the interruption. That beat note would never warble or change. Try that with some of our modern gear.

I've yakked plenty about the broad IF, but there's still one more thing that made this feature of the BC-348 to be a great thing. Back in those days, there were plenty of commercial Merchant Marine ships chugging around out in the ocean. These things had cw radio operations on freqs which the BC-348 readily tuned. The things seemed to try and outdo each other in having the most distinctive, worst cw signal on the whole band. Not only was the purity of the note terrible, but stability wasn't even in their vocabulary. To be Chief Op on one of these tubs, the first thing you had to do when you went aboard was to take all the filter caps out of the power supplies on the rig, and make sure the ship's generator has good, hashy, unregulated ac output. This, of course, went straight to the master oscillator and plates of the final. There were also some Central and South American land stations that did this, too. It was truly awesome listening to these guys on the radio. Their cw sigs bleeped, blurped, rasped, and buzzed. A really good one did this with some kind of super-imposed modulation from an out-of-phase ac component on each dash and dot. To copy these guys, you sat at the op position with a pencil in one hand, hovering over a pad of paper, and the other hand was on the tuning crank.

The idea was, if the signals started drifting so far off center freq that you were losing them on the edge of the band pass, then a little re-tuning would bring 'em back in. This became an iterative process to a skilled op.

To this day, I don't know what kinds of marvelous technology were employed, but those signals would constantly drift up and down the band, blurping and rasping away, and some poor cw op at a receiving site would be copying away with one hand and tuning with his other. Try doing something like this today with one of our modern, narrow receivers. I hope, the above information is sufficient to cause you to reconsider the BC-348 as your receiver of choice in today's world. It ain't all that bad, Jake!

73 de Ron, K5BDJ

Date: Fri, 13 Apr 2001 18:50:10 -0700 (PDT)
From: Glen Zook <gzook@yahoo.com>
Subject: Re: GB> BC-348 clunkers
To: RB <RBigg@seii.net>, glowbugs@piobaire.mines.uidaho.edu
Sender: owner-glowbugs@piobaire.mines.uidaho.edu

Well, the BC348 is not my primary receiver, but, there is definitely one sitting on the top shelf of my operating position.

One thing that helped was to split the r.f. and audio gain potentiometer. From the "factory", they were a single knob with "ganged" potentiometers. If you used one of the holes from the head phone jacks (there are two jacks standard) for a second control, and rewired either the audio or r.f. to that potentiometer, the receiver works even better.

Also, if you wire a 600 ohm to 3.2 ohm audio transformer "backwards" off of the headphone jack (600 ohm to the jack) and use the 3.2 ohm winding, you can get pretty loud speaker output.

I built an AC supply into my BC-348 using the space provided by removing the dynamotor.

Glen, K9STH

Date: Fri, 25 May 2001 14:14:23 -0400
From: teda <teda@nb.net>
X-Mailer: Mozilla 4.7 [en] (Win95; U)

X-Accept-Language: en
To: taylorge59@tryi.com,
"glowbugs@piobaire.mines.uidaho.edu"
<glowbugs@piobaire.mines.uidaho.edu>
Subject: Re: GB> Howdy
Sender: owner-glowbugs@piobaire.mines.uidaho.edu

I have a BC-312 that has the original military RA-20 Ac supply installed where the dynamotor is usually found - and it has the same problem! There is a small hum present at all gain levels. Caps are good.

I attribute this to transformer field, ground leakage, ground loop possibly - eddy currents in the chassis. Sometimes you have to keep the supply separate from the receiver...The field around the transformer can induce 60 Hz eddies into the chassis and surrounding parts - especially if too close to any audio transformers. That's what it is in my BC-312. Just have to live with it.... unless I want to outboard the supply.

And be careful not to have the grounds arrive between supply and RX at different points.

Sometimes reversing the primary connections on the power XFRMR will help. But these RX's were intended to run on DC. Aluminum chasses are no shield against power transformer magnetics. DC filaments could help, too.

Ted - KE3AL

Gerry Taylor wrote:

> Just a note to introduce myself. I am Gerry Taylor, KC5MWZ, Oklahoma City.
> I have been a ham for some six years but a ham at heart since the 9th grade.
> I am 59 years young and currently retired from a chemical technicians
> general background.

>

> Electronics has been a hobby for all my adult life and it has been a part of
> my professional past as well. I remember broadcast radio as the primary
> entertainment form in my childhood and the fascination with the ethereal
> sounds emanating from our multiband, Jukebox size, Emerson.

>

> I have a functioning Hammarlund Super-Pro of the rack mount, military style,
> next to me as I type on this computer. I also have a working Halicrafters
> WR600 (4 band pentagrid converter) receiver.

>

> I am currently working to eliminate a 60Hz hummmmm from a BC348Q which was
> converted, by others, to 120 vac power. They used a transformer and a 6X4
> rectifier and even a choke and two 40mfd caps do not effect the hum. Any
> suggestions

From: "Gerry Taylor" <taylorge59@tryi.com>
To: "glowbugs" <glowbugs@piobaire.mines.uidaho.edu>
Subject: GB> Success on BC-348Q
Date: Wed, 15 Aug 2001 03:43:03 -0500
MIME-Version: 1.0

Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Mailer: Microsoft Outlook Express 5.50.4522.1200
X-MimeOLE: Produced By Microsoft MimeOLE V5.50.4522.1200
Sender: owner-glowbugs@piobaire.mines.uidaho.edu
Precedence: bulk
Content-Type: text/plain;
charset="iso-8859-1"
Content-Length: 1259
Status:

Hi all glowbugs. Well I finally solved my 60Hz hum problem in my 120vac converted BC-348Q. Thanks to Roy and all the others who generously offered help.

I re-capped replacing all electrolytics with orange drops, still hummed. I checked for a grounded B-, did not appear to be the cause. Output tube 6K6GT plate current <32mA in specs.

O-scope shows heavy 60Hz in both b+/- even though appears to be properly filtered. Power supply is arranged with resistance/choke/cap filter as described for a radio app in RCA tube manual circa 1963. Uses a center tapped HV transformer feeding a 6X4 full wave rectifier tube and the B+ comes from the cathode.

Fuzzy old brain works for a while and lightning strikes. The B-(center tap) is not connected to ground for the BC-348 by design (grid supply for output tube) but the filter caps (2 x 40 mfd) are grounded through the cap can to the chassis, not connected to the B-. The B- is not participating in the filter.

Isolated filter caps by mounting on polyethylene block, attached B- to caps can (common to both) and no more 60 Hz hum.

Now to get the BFO working, sure would be nice to work with a schematic that I can read , BAMA not readable in any detail like resistor and cap specs.
Be Well all, KC5MWZ

From: "philip" <dgnova@erols.com>
To: <ARC5@mailman.qth.net>
MIME-Version: 1.0
X-Priority: 3
X-MSMail-Priority: Normal
X-Mailer: Microsoft Outlook Express 5.00.2314.1300
X-MimeOLE: Produced By Microsoft MimeOLE V5.00.2314.1300
X-StripMime: Non-text section removed by stripmime
Content-Transfer-Encoding: 7bit

Subject: [ARC5] Re ARC5 versus BC-348
 Sender: arc5-admin@mailman.qth.net
 Errors-To: arc5-admin@mailman.qth.net
 X-BeenThere: arc5@mailman.qth.net
 X-Mailman-Version: 2.0.8
 Precedence: bulk
 List-Help: <mailto:arc5-request@mailman.qth.net?subject=help>
 List-Post: <mailto:arc5@mailman.qth.net>
 List-Subscribe: <http://mailman.qth.net/mailman/listinfo/arc5>,
 <mailto:arc5-request@mailman.qth.net?subject=subscribe>
 List-Id: Discussion of AN/ARC-5 military radio equipment. <arc5@mailman.qth.net>
 List-Unsubscribe: <http://mailman.qth.net/mailman/listinfo/arc5>,
 <mailto:arc5-request@mailman.qth.net?subject=unsubscribe>
 List-Archive: <http://mailman.qth.net/pipermail/arc5/>
 Date: Fri, 15 Mar 2002 08:51:00 -0500
 Content-Type: text/plain; charset="iso-8859-1"
 X-UIDL: bSn!!C7e!!FMD!!fCB!!

From: philip <dgnova@erols.com>
 To: <boatanchors@sco.theporch.com>
 Subject: BC-348--spec
 Date: Friday, March 15, 2002 8:47 AM

Re J. Forster question about the BC-348, the specs taken from
 Instructio book for operation and maintenance for BC-348-E

Sensitivity less than 7 microvolts average 1.2 microvolts
 receiver sensitivity should be better than 20 microvolts at 20 volts dc
 primary input

AUDIO Power Output
 MVC 400 mw average 590mw mw=3D=3Dmillawatt
 AVC 200mw average 830mw
 Receiver noise less than 15mw average 0.8mw
 audio hum less than 50microwatts
 Selectivity:
 Input Ratio (Input off Resonance) (Imput at Resonance)

		Spec performance	Average
performance			
2:1	(200kc-500kc)	2.1 min 10max	3.0
	(1.5-18mcs)	5 min 10max	7.6
10:1		18max	13.8
100:1		30max	19.1
1000:1		40max	26.2

10000:1

52max

32.4

Philip McCoy dgnova@erols.com

From: "WF2U" <wf2u@starband.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: RE: BC-348-who designed it?
Date: Sun, 19 May 2002 20:53:03 -0400
Message-ID: <NABBLNEJDDKECLKHCAAPCEEEHLAA.wf2u@starband.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Scott,

Congratulations on the purchase of a fine classic military radio. It was used on medium to heavy bomber aircraft in WW2. Your receiver was obviously modified since BC-348's were never powered from AC - they had a dynamotor (28VDC motor and 250VDC generator windings on the same unit) supply which converted the 28VDC on board the aircraft to supply the plate voltage. Also, the first RF tube was never connected as a triode. You can learn about its development and history at
<http://www.armyradio.com/publish/Articles/BC-348/BC-348_Aircraft_Radio_Receivers.htm>

From: "Brian Goldsmith" <brian.goldsmith@echo1.com.au>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: BC-348-who designed it?
Date: Mon, 20 May 2002 17:11:06 +1000
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

----- Original Message -----

From: "Scott Robinson" <spr@earthlink.net>

The triode connection of the 1st RF amp is on the official schematic, so the radio was definitely built that way originally.

*****Greetings to all. According to my records, the models of BC348 to have a triode connected 1st RF stage were the J, N and Q versions. The 1st RF tube was a 6SK7.

Models E,M,P,C,K,L and H were pentode connected with a 6K7 1st RF tube.

Brian Goldsmith.

Date: Mon, 27 Jan 2003 12:34:52 -0800 (PST)
From: Jerry Proc <jerry7proc@yahoo.com>
Subject: BC348 Receiver - Dynamotor Repair Tip
To: Old Tube Radios <boatanchors@theporch.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

* * * * *
* ---REMAINDER OF MESSAGE TRUNCATED--- *
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End of BOATANCHORS Digest 3588
